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			2 through 14 for each		
ASSIGNED DUTY ON FLIGHT ORDER .	PILOT (Last Name)	(Lost Name)	(Last Name)	AIRCRAFT CMDR.	- STUDENT PILOT (Lost Name)
ALCOTO LIST II store to the account house	Meyers	McCline	Davidson	Jenkins	Lest ridines
NOTE: List all time to the neorest hour Total flying hours (including AF fime,					
student time, and other accredited time .	3467:30	2183:55	5853:05	7867:05	1322:45
. Total rated 1st pilot and instructor pilot hours, all aircraft	2166:20	1002:45	4970:40	5944:20	408:25
Total weather instrument hours	129:45	85.30	370:35	563:20	166:20
Total 1st pilot and instructor pilot hours .	84:45	22:45	231:45	66:40	23:05
this model (F-86, B-50, C-119, ctc.)  Total other (Command, a/a cmdr, co-pilot,					
radar control pilat) hours this model  Total 1st pilotrand instructor pilot hours	22:45	61:30	29:50	46:05	68:35
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Total 1st pilot and instructor pilot hours last 90 days	52105	16:55	149:45	37:45	15:30
Fotal pilot hours (night)	19:50	10:35	47:15	13:25	23:45
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hood, last 90 days  Date and duration of last		3			
previous flight this model	4 Jan 51	4 Jan 57	20 Dec 56	12 Dec 56 10-30	12 Dec 56
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INSTRUCTIONS: Attach a copy of AF Form	5 lot pilotlet levelus	ed for the previous	plender month, and to	month in which the	accident occurred
INSTRUCTIONS: Attach a copy of AF Form to Include the flight on which	the accident took p	lack. "	olendor month, and to	monte in which the	accident occurred,
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uty of Name (Last name first, Grade, Seria	Number Ago		ATIONAL ASSIGNM		Used Scat Use
cident and Component or Service	Rating	1000	and Type, Base	Va (16) missing)	Yes No Yes No
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NOTE: If addition	onal space is required	folist all personnel	involved, attach addi	Hongl sheet.	
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1 150	Section G.	-ENGINEERING	DATA		
2 - 10 - 12 - 1 - 1 - 1	ntiol_ Minds	Man a w	is alreadt damaged be	مرد احداده مرده المدين	ole? Yes Y No
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Haw many T.Q.s not complied with of time	of accidental B	(Lin 1.0.	pumbers and titles on	seporate sheet] Se	e Index
Has your Barg previously submitted a UR an		in this pecident? Yo	N-X	4.74	, K , A ,
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is TOR requested? Yes NoX Atlact		4 16.8			4 910
	A sedners			-	Page 2
F FORM 1 A State State of Street at this form my	as the second				FORE /

Section D-FLYING EXPERIENCE OF PILOT(S) INVOLVED

## Section H-DAMAGE

DESCRIBE BRIEFLY EXTENT OF DAMAGE TO AIRCRAFT AND ANY PROPERTY DAMAGE INCURRED.

Aircraft completely destroyed by disintegration, explosion and fire damage to forestation. Extent of property damage 100-500 dollars. (See Index)

D-6,663,300.

Se	ction I—PHASE OF OPERATION		Sec	tion J-ACCIDENT TYPE	1	Section K—CONDITIONS
E 2	ENGINES RUNNING-NOT TAXIING	P	s	Check one accident type as "Primary." Check all others applicable as "Secondary."		(Check all applicable) .
-0.	-Pre-flight	*		Ground or water lapp	100	Immediate forced landing
-	Post flight			Wing-tip landing		Presautionary landing
-	Other			Wheels up landing		Fuel exhaustion or starvation
	TAXIING			Hord landing		Engine stoppage or flameout
	To takeoff			Collapse or retraction of gear Torn.	1	Lost or inaccurate navigation
-	From landing			Undershoot	-	Pertinent T.O.s not complied with
-	Within other area			Overshoof	X	Simulated emergency (Unusual Attitudes)
	TAKEOFF		-	Note-up of noso-over		Ditching (intentional and controlled)
	Run.,			Collision with other aircraft		Accidents in water (other than ditahing)
	Climb	34		Callision with ground or water		Explosive decompression:
	Discontinued (aborted takeoff)			Collisions-Other		. Intentional damage to avoid greater hazard
10	IN FLIGHT ***		1	·Spin 4		GCA, ILAS or ronge opproach used
E	Normal flight		41	Stall	x	Exceeded much or near much
	Acrobatics			Pire and/or explasion on ground		Compressibility ,
-	Farmation tectics		X	Fire and/or explosion in the air		Gear failed to extend
X	Other monegvers (Unusual Attitudes)	X		Airfrome foilure in flight		Prop reversal
je je	LANDING			Abandoned discraft		Uncontrollable parpoising in flight
27	Approach		-	Prop or jet-blast		Struck orresting barrier
	Flore-out			Equipment loss in flight		Touch and go
	Roll	3		Other (Indicate)	Х	Other (Indicate) Exceeded structu
	GO-AROUND			Undetermined		al limits during attempted
-	OTHER (indicate)		1	1.1		recovery.

# Section L-CAUSE FACTOR ANALYSIS

(Sed APM 62-5 for definitions)

Check one primary cause factor (P), and those contributory cause factors (C) that may be applicable.

NOTE: Contributory cause factors may appear in same major category as primary cause, i. e.—both primary and contributing cause factors may be "Operator error."

OPERATOR ERROR	Incorrect aparation of the discraft or its systems; improper technique; inadequate flight preparation; improper procedures; faulty judgment, etc., by person(s) at controls of discraft at time of accident.
CREWMEMBER ERROR	Error committed by any member of the flight crew except operator(s).
SUPERVISORY ERROR	Inadequate exercise of command; inadequate supervision of alrerews, aperations, maintanance and other functions supporting flying operations; inadequate supervision of training, etc. (Incl. IP's & AC's)
MAINTENANCE ERROR	Improper repair, service, inspection or installation of aircraft components, parts or systems; inadequate or improper compliance with established maintenance procedures.
OTHER PERSONNEL ERRORS	Errors committed by other than aircrew, supervisary or maintenance personnel. Includes GCA, Weather, Yower, Communications, Installations and any other supporting personnel, etc.
MATERIEL FAILURE	Failure or malfunction of the airframe, engine or any other system, component or accessory of the aircraft, etc.
AIR BASE OR AIRWAYS	Any molfunction, inadequacy or absence of air base and/or airways equipment or facilities, including deficiencies and hazards of runways, taxiways, aprons, averruns, clear zones, etc.
WEATHER CONDITIONS	Reduced visibility, ising, surbulence, thunderstorms, surface winds winds alaft, law ceiling, etc.
MISCELLANEOUS CONDITIONS	Bird striker, struck tow target, chock, ricochets, hypoxia, vertigo, fatigue, etc.

Present detailed description of acts, events, or conditions confidenced to be primary or contributory cause factors (separate paragraph for each) in FINDINGS pattion of Narrative Description of Accident required by Section M.

UNDETERMINED - "

### Section M-INSTRUCTIONS FOR COMPLETING NARRATIVE DESCRIPTION OF ACCIDENT

THE "NARRATIVE DESCRIPTION" WILL INCLUDE THE FOLLOWING INFORMATION PREPARED ON SEPARATE SHEETS OF PAPER AND ATTACHED TO THE AF FORM 14.

## I. HISTORY OF FLIGHT (See AFM 62-5)

A concise narrative of all established facts and circumstances in chronological order of the flight from tokeoff to termination will be presented; i.e., date, time and point of departure, type of clearance, missian, destinction, hours of fael, ETE, position reports, weather, etc.

## 2. INVESTIGATION AND ANALYSIS (See AFM 62-3)

This section will vary in content according to the complexity of the accident and the extent of the investigation. Depending upon the nature of the accident, separate paragraphs should describe the examination, analysis and findings of any or all of the following: alteraft engines; cirrome and structures; control system; electrical system; hydraulic system; light instruments; navigational aids and air base facilities; adequacy of command and structures; control of flying approximan and training; adequacy of maintenance procedures, inspection and training; unit directives and SOPs, and any ather factors pertinent to the accident, List and discuss any violations.

#### 3. FINDINGS (See AFM 62-5 for details of presentation)

This section will list the significant factual determinations resulting from investigation of the accident. Separate paragraphs will be used to equipment the following: primary cause of the accident; each contributing cause factor of the accident; various deficiencies or inadequacies of equipment, procedures, operations, maintenance, supervision, facilities, etc., which although not direct contributing factors to this accident, are hazards to safety of flight; various considerations not classed as contributory causes of the accident but in themselvation or installation of which would have decreased or minimized the probability of the accident having accurred.

# "4. RECOMMENDATIONS (See AFM 42-5 for details of presentation)

This section will contoin, in concise and direct statements, a listing of the remedial or corrective actions which, in the opinion of the investigating officer at board, will prevent recurrence of similar type accidents and eliminate the deficiencies cited in "Findings" of the investigation.

# RECORDER'S CHECKLIST FOR ATTACHMENTS TO THE AF FORM 14 (See AFM 62-3 for desired sequence of AF Form 14 series and attachments)

	THE	FOLLOWING WILL BE ATTACHED TO ALL REPORTS OF MAJOR AIRCRAFT ACCIDENTS (AF FORM 14)		. 1	HE FOLLOWING WILL BE ATTACHED TO REPORTS OF
1.	x	Narrative description of Accident (Section M)	14.		Board proceedings
12.		AFFeim 14A	15.	x	Statement of control tower operator(s)
3.		AF Form 14B	16.		Statement of runway control officer
4.	X	"AF Form 5; Pilot(s) involved (See Sec. D, Hom 18) .	17.		Statement of weather forecaster
5.	x .	Statements of crew members and witnesses (when available)	13.		Statements of rebuttal or statements declining the apportunity
6.	X	List of Technical Orders nat complied with (See Section G, Item 6)	19.		Transcripts of communications recordings
7.	х	DD Form 175 or AF Form 113 (Clearance)	20,	X	Statement of damage to private property
8.		DD Form 781-1	21.	x	Map showing geographical location of accident
9.		DD Ferm 761-2	22.	X	DD 365F (Form F)
10.	x	Diagram of scene of accident	23,		AF Form 14C
11.		Photographs (identified)	24.	-	AF Form T4D
12.		Index to AF Form 14 attachments \$	25.		AF Form 14E
F3,		NOTE: Defarmine Security classification of reports . (If applicable)	<b>26.</b>		AF Form 14F
			27.	x	AF TO 27 (Unsatisfactory Report)
			20.		If aircraft being transferred, ferried, etc., attach copies of co- ordination messages showing gaining and losing organizations

### Section N-AUTHENTICATION

D GRADEL

WOODROW P. SWANGUTTY COLONEL, USAF

Maintenance Officer. (b) (6)

Major/ IKAF

T PROFING OFFICE, 1956 G-375073

VANCE H. MARCHBANKS, JR. Col. USAF (MC)

Memb (5) (6) Major, USAF

(6) capt., USAF

AF FORM 14 Previous adillant of this form may be used

Member (0) (0)



Lt. Colonel, USAF

SECTION M, AF FORM 14

# I. HISTORY OF FLIGHT:

On 10 January 1957, B-52D serial number 55-082 disintegrated in flight and fell to the ground eleven miles southeast of Loring Air Force Base, Maine at approximately 12:44 hours EST.

The aircraft had been airborne for approximately four hours and thirty mimites on a routine Standardization Board check flight when the co-pilot of one of the two pilot teams aboard took position in the left seat for demonstration of his instrument proficiency to the Standardization Board pilot occupying the right seat.

After demonstrating his instrument proficiency in turns at an altitude of approximately thirty to thirty-one thousand feet.

The co-pilot who was occupying the left seat survived the accident with major injuries. His ejection seat was torn from the floor and separated from the nose section during aircraft in flight disintegration. He had made no attempt to effect normal ejection. The other eight occupants of the aircraft were fatally injured.

# II. INVESTIGATION AND ANALYSIS:





# III. FINDINGS:

- 1. The primary cause of the accident was an attempted recovery from an unusual attitude which resulted in exceeding the structural limits of the aircraft.
- 2. Failure of the horizontal stabilizer occurred during recovery from a near vertical dive which resulted in subsequent disintegration of the aircraft.
- 3. There was no evidence of structural or material deficiency in the airplane structure.
- 4. All crew members were qualified in accordance with current SAC directives to perform this mission.
  - There were no violations of existing directives.
- 6. It is probable that Lt. (1) misinterpreted the presentation of the MM-1 attitude indicator.
- 7. The instructor pilot in the co-pilot's seat was unable to was actuate the electrical slam system from his position.
- 8. There is inadequate discussion in the Flight Handbook on recovery techniques from unusual aircraft attitudes.
- 9. The tail gunner jettisoned the tail turret at sufficient altitude to have effected an escape; however, for undetermined reasons it was not accomplished.
- 10. Crew members did not receive bail out warning and with the exception of the tail gunner made no attempt to escape until too late to accomplish safely.
- 11. The failure of the ECM operator to fasten his seat belt caused him to be prematurely expelled through the open escape hatch.
- 12. Grew members in excess of the number of ejection scats had no opportunity to escape.
  - 13. There is no fail safe provision within the lateral control system.
- 14. The possibility exists that the stabilizer screw loads became higher than the maximum operating capability of the stabilizer actuating system.

6































































































































